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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,073	10/21/2003	Tokihiro Shimura	4230-101	6700

23448 7590 10/03/2005

INTELLECTUAL PROPERTY / TECHNOLOGY LAW  
PO BOX 14329  
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER
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MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/690,073

Applicant(s)

SHIMURA, TOKIHIRO

Examiner

Michael A. Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 12-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/15/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-11 and 23-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new matter added to claims 1, 23 and 24 is the limitation “containing at least one of boron, aluminum and titanium” because this limitation is much broader than what is disclosed in the specification. Although the specification states that these components can be present, these components are present in specific amounts. Since the claims do not define the amount of these components it is broader in scope than the disclosure. This amendment implies any and all amounts for these components which is not the case according to the specification.

The new matter added to claims 1, 23 and 24 is also the “proviso” limitation because the specification never defines this proviso in a single passage or example. Applicant states that examples 1-5 and example 8 support this, the examiner disagrees because no single example contains this proviso in its entirety. It is improper to combine examples to make up a claimed limitation. The only example that teaches titanium in the absence of boron and aluminum is “comparison 5” but the amount of silicon is only defined 0.8 percent (specific amount). In addition, the amount of silicon defined in the tables range from 0.7-1.4%, thus the amount of “at least 0.7 wt.%”, as claimed, is also new matter because this limitation is much broader than what

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is disclosed in the specification. This amendment implies any and all amounts of 0.7 and above for this component which is not the case according to the specification. Finally, applicant points to example 8 but this example does not support the newly added proviso, since aluminum is present.

The new matter added to claim 11 is the limitation “anhydrous silica” because this limitation is much broader than what is disclosed in the specification. Although the specification states that this material can be used, said material is **only limited to** “particles”. Since the claim does not define that the anhydrous silica is a particles, it is broader in scope than the disclosure. Anhydrous silica, as claimed, can be a film or any other form other than a particle which is not the case according to the specification.

The new matter added to claims 23 and 24 is also the limitation “pressurized” because this limitation is much broader than what is disclosed in the specification. Although the specification states that pressure can be used, it is limited to high pressure (high pressure being indefinite). As is now claimed “pressurized” means the use of any pressure (i.e. low or extremely small pressure applied), thus it is outside the scope of what is taught in the specification.

#### **PREVIOUS REJECTIONS:**

**(1)** Claims 1-8, 11 and 23-24 are rejected under 35 U.S.C. 103(a) as obvious over Bergkvist in view of Achikita et al. for the same reasons set forth in the previous office action which are incorporated herein by reference.

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**(2)** Claims 1-8, 11 and 23-24 are rejected under 35 U.S.C. 103(a) as obvious over DE 19815087 in view of Tanaka et al. for the same reasons set forth in the previous office action which are incorporated herein by reference.

**(3)** Claims 1-11 and 23-24 are rejected under 35 U.S.C. 103(a) as obvious over JP 2002-256255 in view of Bergkvist for the same reasons set forth in the previous office action which are incorporated herein by reference.

**(4)** Claims 1-11 and 23-24 are rejected under 35 U.S.C. 103(a) as obvious over JP 2001-009727 in view of Magnusson et al. and Bergkvist for the same reasons set forth in the previous office action which are incorporated herein by reference.

**(5)** Claims 1-8, 11 and 23-24 are rejected under 35 U.S.C. 103(a) as obvious over either (1) JP 2002-114968 or (2) JP 2001-122644 **both** in view of Bergkvist for the same reasons set forth in the previous office action which are incorporated herein by reference.

**(6)** Claims 9-10 are rejected under 35 U.S.C. 103(a) as obvious over DE 19815087 in view of Tanaka et al., as applied to claim 1 above and further in view of either (1) JP 2002-256255, (2) JP 2001-009727 or (3) Kydd for the same reasons set forth in the previous office action which are incorporated herein by reference.

**(7)** Claims 9-10 are rejected under 35 U.S.C. 103(a) as obvious over either (1) JP 2002-114968 or (2) JP 2001-122644 **both** in view of Bergkvist, as applied to claim 1 above and further in view of either (1) JP 2002-256255, (2) JP 2001-009727 or (3) Kydd for the same reasons set forth in the previous office action which are incorporated herein by reference.

**The above rejections are upheld in view of the new matter to the claims.**

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**NEW REJECTIONS (assuming arguendo about the new matter above):**

Claims 1-8, 11 and 23-24 are rejected under 35 U.S.C. 103(a) as obvious over Bergkvist in view of Sridhar et al. and Achikita et al.

The teaching according to Bergkvist are defined in the previous office action. This reference also teaches that impurities can be present in the stainless steel.

Sridhar et al. teaches in the abstract and column 2, lines 60-64 that impurities in stainless steels include aluminum.

The teaching according to Achikita et al. are defined in the previous office action.

All of the examiners reasoning for the claimed invention being taught by Bergkvist in view of Achikita et al. are defined in the previous office action and are incorporated herein by reference. Bergkvist states that impurities can be present in the stainless steel and since aluminum is a impurity in stainless steels, as shown by Sridhar et al., this component is obvious in the steel according to Bergkvist. The motivation is that Bergkvist teaches that impurities can be present. With this being obvious (i.e. aluminum in the steel according to Bergkvist), the claimed invention is met since the claimed invention can include aluminum (line 3 of claim 1) and the proviso limitation is a proviso assuming no aluminum is present, thus said proviso does not have to be a definite claimed limitation. In other words, since Bergkvist suggests that aluminum is present (thus teaching stainless steel that contains titanium and aluminum), the claimed proviso does not exclude this reference because it is a proviso based on the absence of aluminum.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as obvious over Bergkvist in view of Sridhar et al. and Achikita et al. as applied to claim 1 above and further in view of DE 19815087 and at least one of (1) JP 2002-256255, (2) JP 2001-009727 or (3) Kydd.

It is the examiners position that it would have been obvious to use the stainless steel according to Bergkvist in view of Sridhar et al. and Achikita et al. as an abrasive grit because the DE teaches that stainless steel powders are known to be used for this purpose. The motivation for this combination is defined in the secondary reference when it teaches a conventional use for stainless steel powders. With respect to the surface treatment, it is the examiners position that it would have been obvious to surface treat the stainless steel particles according to Bergkvist in view of Sridhar et al., Achikita et al. and DE 19815087 in order to optimize the performance of the abrasive by providing fluidity and preventing agglomeration, as shown by any one of (1) JP 2002-256255, (2) JP 2001-009727 or (3) Kydd. The agglomeration of blasting media is unwanted in order to eliminate the possibility of any larger particles being introduced during the blasting process which will result in producing much less than optimal results (i.e. surface scratching due to the larger particles). In view of this, any known way to prevent agglomeration and optimize the abrasive performance is clearly obvious to the skilled artisan.

Applicant's arguments filed 9/23/05 have been fully considered but they are not persuasive.

With respect to the claims amendments, this has been addressed above (see new matter rejection).

With respect to the previous rejections 1-5 defined above, applicants are arguing the amended limitations which define new matter as set forth above and thus since said limitations are new matter, they can not be considered as part of the claimed subject matter.

With respect to the rejections 6-7 defined above, applicants do not argue the combination as applied. In addition, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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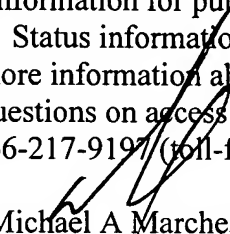
The examiner acknowledge the IDS filed 7/15/05

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/05  
MM

  
Michael A Marcheschi  
Primary Examiner  
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